

str. 137 / úloha 744

$$A = 2 \text{ l}$$

$$m = m_{\text{v}} = 5 \text{ kg}$$

$$t_0 = 5^\circ\text{C}$$

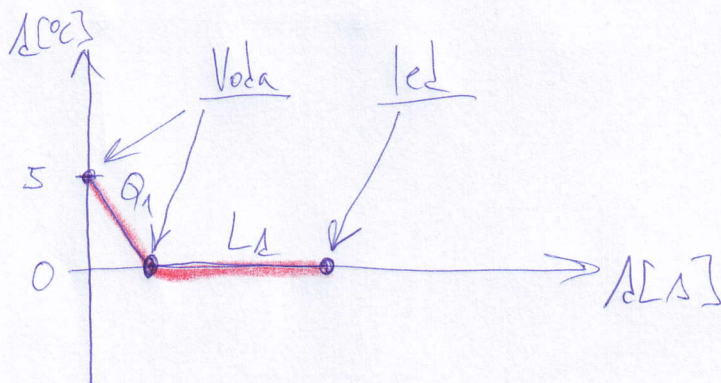
$$t = 0^\circ\text{C}$$

$$Q = ? \text{ [J]}$$

$$c_{\text{v}} = 4200 \frac{\text{J}}{\text{kg} \cdot ^\circ\text{C}}$$

$$l_{\text{d}} = 334\,000 \frac{\text{J}}{\text{kg}}$$

Náčrt:



$$Q = Q_1 + L_{\text{d}}$$

$$Q_1 = m \cdot c_{\text{v}} \cdot (t_0 - t)$$

$$L_{\text{d}} = m \cdot l_{\text{d}}$$

$$Q = 105\,000 + 1\,670\,000$$

$$Q_1 = 5 \cdot 4200 \cdot (5 - 0)$$

$$L_{\text{d}} = 5 \cdot 334\,000$$

$$Q = 1\,775\,000 \text{ J}$$

$$Q_1 = 105\,000 \text{ J}$$

$$L_{\text{d}} = 1\,670\,000 \text{ J}$$

$$Q = 1,8 \text{ MJ}$$

Vode bylo odebráno 1,8 MJ tepla.